

AMENDMENTS TO THE CLAIMS:

Complete Listing of Claims

Claims 1 - 7 (canceled)

1 Claim 8. (currently amended) A system for extending a signal path of a host bus
2 comprising:
3 a first repeater portion connected to a first segment of the host bus;
4 a second repeater portion connected to a second, non-hierarchical
5 segment of the host bus remote from the first segment of the host bus, where
6 the first and second portions of the repeater are connected by a serial link,
7 wherein at least one of the repeater portions further comprises:
8 an interface to the first bus segment;
9 a transaction queue with a data buffer connected to the interface;
10 a link translation layer connected the transaction queue to translate
11 incoming transactions from the first bus segment into serial streams to be sent
12 over the serial link, further comprising a transaction decode circuit connected to
13 the interface to the first bus segment to determine by subtractive decode which
14 transactions on the first bus segment to accept and pass on over the serial link.

Claims 9 -14 (canceled).

1 Claim 15. (previously presented) The system according to claim 8, wherein
2 the serial link is chosen from one of the following: LVDS, Gigabit Ethernet,
3 InfiniBand, IEEE1394, RF Wireless, Infrared Wireless, or any combination of
4 these.

1 **Claim 16.** (previously presented) The system according to claim 8, wherein
2 the host bus is a PCI bus.

1 **Claim 17.** (previously presented) The system according to claim 15, wherein
2 the host bus is an LPC (Low Pin Count) bus as defined by Intel 1997.